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SOME PRACTICAL HINTS CONCERNING THE CARE OF NEW-BORN CHILDREN.

NOTES OF A LECTURE AT THE HARVARD MEDICAL SCHOOL.

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UNDER ordinary circumstances, the first thing to be done to the child is to clean it. Babies are born with more or less of that disagreeable salve-like matter sticking to their skins. Sometimes the whole body is covered with it; the hair is filled with it, and the eyebrows. Sometimes, on the other hand, it is hardly to be seen, except in the folds of the groins, in the axillæ, in the cleft of the nates, and about the neck; and in an occasional case you will find it only about the labia, if a female child, or if a male child, between the scrotum and the thighs. This substance, known as the vernix caseosa, does not seem to be any more or less abundant according to the healthful condition of mother or child. But it must be got rid of, or the folds and clefts will become sore. Water alone will not remove it, neither will any ordinary rubbing with soap. Oily substances will mix with it, with very slight rubbing, and the use of soap and water will then, with perfect ease, remove the mixture. Of late, I have very frequently advised the use of oil alone to clean the new-born child; no soap, no water; a little sweet oil rubbed in with a small bit of sponge; and as each part in turn has been oiled, and then wiped off dry with the towel, the child is as clean as if washed with soap and water. Many persons have an idea that unless soap and water be used the child cannot be clean. But oil is as clean as soap. The object of washing is to get rid of dirt, and it depends upon what the particular dirt is composed of, whether soap, or oil, or some other substance is the best thing to use for its removal. Alcohol has been substituted for oil to dissolve this substance, but the objection to its use is that it dissolves the oily matter from the child's skin, and also that it has the effect to chill the child. In either case, too much work would be thrown upon the lungs of the new-born.

The child being once made clean it is not necessary that it should have an entire bath daily. Its nates and other parts in the neighborhood should be bathed often enough to keep them clean, even if it be

with every change of napkin ; but to strip it, and in a cold day and in a chilly room to torment the little shivering child for a wash, according to an established daily rule, is simply a matter of cruelty.

One point you should give positive instructions upon : that is, the necessity for drying the skin of the child thoroughly before dressing. A good rubbing with the hand, after the rubbing with the towel, is agreeable to the child. A properly dried skin is more likely to escape the sore and cracked condition that young children are apt to suffer from. This cannot be prevented so well by the flesh-powder, the burned flour, or the powdered starch with which nurses are often so particular to dust the child. Indeed, you will find that these applications frequently become acid, and increase or even produce the troubles which they are intended to obviate.

The child should be warmly and in every way comfortably dressed. The still adherent umbilical cord should be sufficiently covered to prevent its soiling the clothing, and as a matter of cleanliness should be made short ; if it is not tied before the pulsations in it have ceased, there will be no risk of hæmorrhage from its cut extremity. I never would cut the cord till all pulsation in it was stopped. The open condition of its vessels is a safety-tube for the lungs and heart behind. Having cut it, there is no need of the huge wad of cotton lamp-wicking often wound about it. Indeed, if there were no ligature applied, it is very seldom that any dangerous bleeding would occur. The cord should be short, the ligature small, the covering ample ; and if the latter become offensive in a day or two it should be removed.

The first article of clothing put on is usually a flannel or knit swathe or belly-band. It is a very common mistake of nurses to put this on very tight, to prevent, as they say, "rupture of the navel," or to give the child's bowels support. It is as bad as tight lacing in the adult, or worse than that ; organs are compressed which require the utmost liberty ; the action of the lungs, and consequently of the heart, is interfered with ; the child cannot nurse, and you will occasionally be called in to see a "blue baby," not from organic trouble, not from an open valve, but blue and suffocating from compression, that might almost as well be about the neck ; and when you get to the house you will find perhaps a little half-suffocated child, whining, or rather moaning, too weak and too much straitened to cry. The herb teas and the spiced waters administered by the nurse have done it no service ; but the taking out of half a dozen pins from the belly-band stops the moaning, restores the color, and the child can both feed and sleep. Prevention is better and easier than cure. Strings on the belly-band are better than pins, if either be used ; but the best band requires neither, being broad, thick, loose, and elastic, woven or knit of good woollen yarn.

A CASE OF SPINAL PARALYSIS IN AN ADULT, RESEMBLING THE SO-CALLED INFANTILE PARALYSIS.¹

BY D. F. LINCOLN, M. D.

IN the present state of science there can be no doubt of the propriety of establishing a class of spinal paralyses, dependent on a lesion of some of the large motor cells in the anterior cornua of the spinal cord. Most of the cases of this class occur between the ages of six months and two years; hence the trivial designation, infantile paralysis. A few, however, certainly occur in adult life. Duchenne was the first to recognize this latter fact, and the four cases published in the last edition of his "Électrisation localisée" were the first that were distinctly classed with "infantile" paralysis.

The name given by Duchenne, though expressive, is unfortunately very clumsy: *Paralyse spinale antérieure aiguë de l'adulte par atrophie des cellules antérieures de la moelle*. Frey² has proposed the shorter name "*Poliomyelitis anterior*," qualified by the addition of *acutissima* or *subacuta*, *adultorum* or *infantum*; as the case may be.

Before describing the present case, it will be well to give a brief summary of the essential symptoms of the disease, as we meet with it in young children. These symptoms are: A very rapid, almost sudden development of the palsy in its full extension; a subsequent wasting of the stricken muscles, usually with fatty degeneration; a loss of the power to react under the stimulus of induced electricity, with peculiar reactions under that of galvanic currents. There is a tendency to partial improvement; but if the improvement is only partial, deformities are apt to follow. There is an entire absence of symptoms referred to the bladder or rectum, to the muscles of respiration, or to the facial muscles; there is no tendency to atrophic changes of the skin and nails, or to the formation of bed-sores; and symptoms referable to irritation or paralysis of sensory nerves are very unusual. Thus infantile paralysis, in at least the great number of cases, is a pure motor paralysis, exclusively of spinal origin. We will now proceed to the case in hand.

G. E. B., a hardware merchant, aged forty-nine, a tall, stout man, at the time of the first visit presented the appearance of tolerably good health. He had never had rheumatism or syphilis or any affection of the heart; was never subject to headaches or vertigo; never had an attack in any way resembling the present one. His sight and hearing were unimpaired. His mode of life was very regular and moderate, without exposure to any special injurious influences. His father and one of his sisters has fallen victims to what appears to have been

¹ Read before the Boston Society for Medical Observation.² Berliner klinische Wochenschrift, 44, 1874. See also Medical Times and Gazette, January 23 and 30, 1875.

cerebral hæmorrhage, at the ages respectively of fifty-four and fifty-three. When attacked, he had just returned from a vacation-trip of three weeks in the British Provinces; he had not been exposed to cold or rain or any other known source of disease, and was feeling unusually well.

On the 6th of August, 1873, he went to his business as usual. During the forenoon he noticed a feeling in his legs as if they had fallen asleep. This feeling came on again and again; and with it he began to be a little weak in the legs. Recollecting that his father and sister had died of paralysis, he was expecting an attack all the morning, although nothing beyond these premonitions occurred until about two o'clock. At that hour he was on his way to the station, and hailed a horse-car, but on trying to step upon the platform found that he could not do it. He was helped in, rode to the station, and thence by train to his home in the suburbs; was helped into a carriage, and driven to his house, where he was still able (with assistance) to walk up-stairs to his bedroom, but when seated was unable to rise from the chair. He was got to bed, and stayed there till I saw him, two days later; the weakness increased somewhat after this, but not much.

When seen by me on the 8th, two days later, his condition was but little altered. It was evident, in the first place, that the attack was not of cerebral origin. There was not the slightest evidence of any mental disturbance, nor has there been any up to the present day. He had not so much as felt giddy. His spirits were cheerful, and his mind active. The muscles of the face and eyeballs were under perfect control; the pupils were normal in size, and contracted well. Speech was natural. Vision and hearing were without defect.

The bladder and rectum performed their functions normally. The senses of touch, pain, and temperature were normal in the hands, and nearly so in the feet. Reflex contractions could hardly be obtained from the soles. There was a complete absence of abnormal sensations; the tingling he had felt on the day of the attack had passed off, and did not reappear; there was no sensation of numbness or constriction, no muscular twitching or trembling; he felt no pain anywhere, and the spine when percussed was not tender. The pulse was 80, soft and regular; the heart-sounds were normal, temperature in axilla was 98°. The urine was tested a few days later and found to be free from albumen.

The muscles of the neck and limbs, except below the knees, were generally in a condition of semi-paralysis. He lay on his back, almost helpless; could not raise his head from the pillow without some help, could not raise his knees from the bed by flexing the thighs, and the grasp of his hand was very feeble indeed. There was no absolute paralysis of any muscle. Below the knees he seemed to have his full strength. The weakness was much more marked on the left side than on the right.

His condition remained as thus described during the six months of his confinement to the house, except that the paresis of the muscles gradually disappeared. A slight sense of muscular fatigue in the shoulders should be mentioned; this soon left him. Loss of appetite was relieved by nux vomica and cinchona, and subsequently by tincture of iron with strychnia, and Hørsford's acid phosphates of lime and magnesia.

On the fifth day of the attack, treatment by the induced electric current was begun, when it was found that the muscles, some of them at least, had already lost a part of their susceptibility to this stimulus. The loss went on increasing; within a week or ten days from the first attack it was perceptible in all the paralyzed muscles, and in some of them it afterwards appeared to become total for a short time. By the twenty-first day the loss had become so great that the galvanic current¹ was substituted for the faradic in the hope of obtaining a more satisfactory reaction. It was found that the galvanic reaction was also diminished, though to a less extent than the faradic; for example, the rectus femoris of the left side required forty cells to produce a feeble contraction, while twenty cells acted strongly upon the corresponding muscles of the son of my patient, a vigorous young man. The galvanic treatment then adopted, and continued until his recovery, consisted in the application of descending current to the spine, and of labile and interrupted currents to the muscles, three times a week; the faradic current was also continued for a few weeks. I subsequently found much advantage in using a hot-air bath long enough to bring my patient into a profuse sweat, directly before making these applications. In these measures, and in the various simple gymnastic exercises which he was able to perform with assistance, I was greatly assisted by his son, a student of medicine.

The reaction to both orders of electric currents seemed extinct in the recti femoris muscles on the twenty-fifth day, but this was partially due to a degree of weakness in the fluids of the batteries; improvement, however, seemed to commence from that period, and to go on steadily. The trapezii, glutæi, and sartorii, were at least equally reduced; the sterno-mastoids reacted rather better, but it was impossible to find any superficial muscle in the neck, shoulders, arms or thighs, that reacted quite well. There was, however, no difficulty in swallowing or speaking, and the act of respiration was performed easily. In each muscle the power to respond to the galvanic shock seemed to improve very rapidly, however low it had fallen at the time of commencing the special treatment. As regards the reactions of the nerves, my observations were defective: it is noted, however, that the full strength of the faradic

¹ From one of Hirschmann's portable zinc-carbon batteries (worked with bisulphate of mercury), of which the action nearly corresponded with that of an equal number of Daniell's cells.

battery produced but a slight muscular contraction (*flexores digitorum*) when the negative pole was placed on the left brachial plexus, above the clavicle, and none at all when placed on the right, the positive being put on the back of the neck. This on the sixty-seventh day, when he had lost a good deal in weight, and the deep parts of the neck were very accessible. The median and ulnar nerves reacted perfectly in the fore-arm at a somewhat earlier period. The "exaggerated reaction" was never observed in nerves or muscles.

The paralyzed muscles wasted, as is usual; in the course of six weeks this became very marked, and soon afterwards (before the fifty-second day) it is recorded that the hands began to tremble when held out, the balls of the thumbs being first affected. This tremor did not increase much, and at present, after the lapse of fourteen months, is not troublesome. His handwriting is not altered, though he cannot write as fast as formerly. The right hand now grasps the dynamometer with a force registered by 70, which is more than one half of the normal register for a person of his habits. On the fiftieth day it marked only 25, on the fortieth 20, and much less on previous occasions. His general improvement was very gradual, and it was six months before he was able to ride out. He resumed his business by degrees, and is now attending to it pretty much as before the attack, retaining his old habit of standing at his desk instead of sitting. He has lost twenty-five pounds in weight, chiefly of fatty tissue. The muscles are somewhat flabby, but not remarkably so for a man of his pursuits. The general health remains quite good, and the diminution in the weight of his body is regarded by him with satisfaction rather than the reverse.

In making the diagnosis of this case we can at once exclude the following affections:—

1. Progressive muscular atrophy. Not to speak of the totally different mode of invasion and of progression, the electric reaction by itself would be conclusive evidence against this diagnosis.

2. Lesion of the encephalon. There was no evidence whatever to indicate such lesion.

3. Acute myelitis. Under this term we commonly understand an affection involving the greater part if not the whole of the thickness of the spinal cord. The patient has fever, tenderness and pain in the back, paralysis of the lower limbs, bladder, and rectum, gangrene and sloughing of the nates, loss of sensibility in the paralyzed limbs, with an exaggerated reflex action, and an unimpaired electric reaction in the same limbs. The present case is as remote as possible from such a group of symptoms.

4. Hæmorrhage in the cord, independently of myelitis, hardly occurs. Its consequences would be similar to those of acute myelitis. And it is very difficult to see how embolism could have produced the present group of symptoms.

5. The implication of the posterior columns of the cord, in any morbid change, should be followed by impairment of the power of coördinating muscular movements, or by loss of tactile sensibility, neither of which symptoms was present.

6. The posterior nerve-roots were certainly not affected.

7. The posterior gray matter of the cord. Lesion of this organ would involve a loss of the sense of pain.

8. The lateral white columns. Chronic sclerosis of these organs causes wasting of the muscles, and a loss of motor power; but this loss of power comes on quite slowly, and is usually accompanied by rigidity of certain muscles, and spontaneous pains, and formications, which did not occur in our case. The electric reaction, also, is retained till the very last in this complaint, the "progressive lateral sclerosis with muscular atrophy" of Charcot. In the presence of tremor and muscular wasting, and still more in the absence of fever, of complications of the bladder or rectum, and of eschars, the disease as described by Charcot resembles the present case; but his dictum is positive, that "wherever you meet with lateral sclerosis, contraction of the muscles is sure, sooner or later, to show itself in a more or less marked degree."¹ And contractions have not occurred in our case.

We have now narrowed our inquiry to the anterior cornua and columns of the spinal cord. Unless, indeed, we are inclined to seek in the peripheral nerves and the muscles for the causative lesion; but I think my audience will spare the argument upon this head, and suffer me to proceed directly to the statement of a distinct and nearly constant lesion, occurring in those parts of the spinal cord in which we have been led *a priori* to expect it. In nine of twelve² autopsies made upon children, the nerve-cells occupying the external portion of the anterior cornua, and the nervous reticulum formed by their prolongations, have been found atrophied; in the other three, the anterior roots were atrophied, and the anterior columns sclerosed. To this add, as more or less prominent accompaniments, proliferation of the connective nuclei, dilatation and fatty degeneration of blood-vessels, and distinct limited foci of softening, in the anterior cornua. In Gombault's case, occurring in an adult, granular degeneration of the ganglion cells of the anterior cornua was observed throughout the length of the cord, while the white substance and posterior gray substance were uninjured. For the sake of fairness it should be added that three apparently trustworthy examinations have been reported by Bouchut and Kétli, in which the spinal cord of children was found free from microscopical lesions. The evidence, however, largely preponderates in favor of that view of the pathology of

¹ London Lancet, August 1, 1874.

² For a *résumé* of literature, see Dr. Mary Putnam Jacobi's exhaustive article in the American Journal of Obstetrics for May, 1874.

the disease which permits us to name it an "inflammation of the motor tract of the spinal cord."¹

It is needless to recapitulate the points of resemblance between "infantile paralysis" and the case I have related; in fact, the comparison has already been drawn, in the sketch of the disease with which the article opens. There are, however, some points of apparent disagreement. *Fever* often attends the onset in children; it was absent in this case, but among the similar cases hitherto reported in adults there are several in which fever was a very marked initial symptom. *Convulsions* sometimes occur in children; but they form so frequent an accompaniment of the acute diseases of infancy as to possess very little diagnostic importance. *Pain* in the back and limbs is another initial symptom, which was observed in a number of the adult cases. And the *deformity* which occurs so often in children is paralleled in several adult cases, as in No. LXXI. of Duchenne, in which the attack, brought on by exposure to cold, was followed by wasting of the flexors of one foot, with talipes equinus; as also in the one briefly mentioned by Dr. Jacobi,² with slight varus equinus and clawed hands.

Seguin has enumerated fifteen cases in adults, and has added six observed by himself. The latter exhibit symptoms of disturbance of sensation to a greater extent than is usual; and in one case the face, tongue, and muscles of the orbit were paralyzed, which has not been observed in other cases. The latest that has come to my knowledge is one by Frey, quite typical in every respect except its very gradual approach and progress; it is the one alluded to in the beginning of this article, under the name of "poliomyelitis." Of the list given by Seguin, I am compelled to reject Nos. VIII. and IX., cited from Moritz Meyer, whose account is excessively meagre; this leaves nineteen, or, with Frey's case and the one now given, twenty-one, of which twelve were acute and the others subacute or chronic.

In regard to the prognosis of this disease in adults, it is important that the physician should clearly distinguish cases of ordinary myelitis, which it is not hard to do. What has been called "acute ascending paralysis" can with difficulty be distinguished at the outset from the present disease; its leading feature consists in a tendency to spread from one to another region of the spinal cord, either upwards or downwards, and to produce death in a week or two by paralysis of the muscles of respiration; if this tendency is not present, life will almost certainly be spared. Even in acute ascending cases, there is room to hope that the process may be arrested. As for the relief of local paralysis, the prospect is good in proportion as we succeed in making the muscles react under electrical stimulation.

¹ As proposed by Seguin in his recent able monograph, read before the New York Academy of Medicine, November 5, 1874, and printed in the Transactions of the Academy.

² Loco citato, pp. 21, 22.

RECENT PROGRESS IN THERAPEUTICS.¹

BY R. T. EDES, M. D.

Digitalis. — Schmiedeberg² has made a series of investigations upon the active principles of digitalis. All of the commercial so-called digitalins are more or less composite substances, and contain different proportions of at least four active principles, to say nothing of inert constituents. Of these, digitonin is very similar in its properties to saponin. This forms in most cases the *bulk* of the commercial soluble digitalin. [This is a somewhat remarkable circumstance, since saponin has been shown by Köhler to be in many points the physiological antagonist of digitalin, though of what kind he does not say,³ — REP.]

Digitalin is the most important constituent of Homolle and Quenne's digitaline, and with digitalein produces the characteristic action on the heart of the various kinds of commercial soluble digitalin. Alone it is almost insoluble in water, but partially dissolves in the presence of digitonin and digitalein. Digitalein is also found in the commercial soluble digitalin. Digitoxin is the most active principle of digitalis, and the crystalline digitalin of Nativelle is chiefly, but not wholly, composed thereof.

Ergot. — Buchheim⁴ has sought anew the active principle of ergot. It is contained, as nearly all observers are agreed, in the watery extract, and Buchheim obtains it therefrom, by processes which it is unnecessary to detail, in a state of tolerable purity, it being mixed only with some remains of leucin and some inorganic bodies. He names it, of course, ergotin (which is neither the ergotin of Wiggers nor that of Bonjean, nor yet the ergotina of Wenzell), and says that it is closely analogous to animal gelatine, being a modification of the gluten in the healthy rye, produced by the fungoid growth of which the ergot consists. The ergotina and ecbolina of Wenzell are contained therein, but are, as he (Buchheim) says, one and the same substance. The irritant effects of the preparations of ergot when injected subcutaneously are due, according to Buchheim, to the strong acid reaction which is produced by free lactic acid, and he recommends accordingly that any preparation which is to be used hypodermically should be carefully neutralized with soda.

Buchheim looks upon the processes by which the material designed for the nutrition of the healthy grain of rye is transformed by the ergotic fungus into numerous and easily decomposable bodies, as analogous to putrefaction, and accordingly places ergotin among the putrid or

¹ Concluded from page 323.

² Archiv für experimentelle Pathologie und Therapie, iii. 16.

³ Archiv für experimentelle Pathologie und Therapie, i. 138; Boston Medical and Surgical Journal, September 25, 1873: Report on Therapeutics.

⁴ Archiv für experimentelle Pathologie und Pharmakologie, iii. 1.

septic substances, which we have heretofore known only as morbidic and not as therapeutic agencies. He thinks that it may be possible to obtain from putrefying blood a substance which shall exhibit the activity of ergot.

H. Köhler¹ has compared the action of the watery and the alcoholic extracts of ergot as represented respectively by the ergotins of Bonjean and Wiggers. Both diminished the temperature, contracted the pupil, and retarded the respiration. Both diminished the irritability of the peripheral sensitive nerves. The actions on the circulatory system, namely, irritation of the vaso-motor centre, slowing of the pulse, contraction of the arteries, and finally cardiac paralysis, belong exclusively to the watery extract. The alcoholic extract affects especially the intestinal tract. As to the action on the uterus, Köhler considers the heightened irritability of the peripheral motor nerves caused by the alcoholic extract as having an accessory value, while the "anæmic irritation of the nerve centres due to the watery extract" is the chief cause of the uterine contractions.

For general therapeutic application, therefore (as a hæmostatic, etc.), the watery extract is by far the best, while for obstetric purposes it is desirable to employ both, or, in other words, the ergot in substance.

Emetics. — Anything in the nature of a generalization, which is at the same time simple and yet not chiefly based in the imagination, is a most refreshing discovery in the midst of the enormous mass of isolated and contradictory facts and fancies with which pharmaco-dynamics has been of late years enriched. The exceedingly depressing effect upon the muscular system of tartar emetic, sanguinaria, lobelia, veratrina, and many other substances which act as emetics, is well known. Harnak² has examined several other emetics with reference to their effect on the muscular system, and adds to the list several metallic salts, especially of zinc and copper. He states that of the metallic salts which do not have an intense local action, those alone which have a specific emetic effect possess a marked action in small doses upon the striated muscular fibre. Furthermore, all substances that have a specific emetic action stand at the same time in close relation to the striated muscular fibre, since even in relatively small doses they destroy its excitability.

Jaborandi. — M. Albert Robin³ gives the results of a somewhat elaborate study of the new diaphoretic, jaborandi. The sweating does not come all at once, but gradually, and after having been announced by redness and heat of the face, beating of the temporal arteries, and a feeling of fullness in all the parts which sweat.

The beginning of the perspiration occurs in from five minutes to an hour, the average being twenty to thirty minutes. The maximum is

¹ Virchow's Archiv, lx., 389; Centralblatt, 1874, No. 43, page 685.

² Archiv für experimentelle Pathologie und Therapie, iii. 44.

³ Journa de Thérapeutique, Nos. 23 and 24, 1874.

attained in from twenty minutes to one hour and thirty-five minutes, the average being forty-five minutes. The duration is more variable, but is, on an average, two to two and one half hours. The total quantity of perspiration is roughly estimated at from three hundred to five hundred cubic centimetres (nine to fifteen ounces).

Rheumatic patients sweat more easily than albuminuric. The perspiration comes readily in emphysema, cardiac and pulmonary affections, and in some diseases of nervous centres, as cerebro-spinal meningitis. On the other hand, the constipated and dyspeptic sweat with difficulty, and those poisoned with lead hardly at all. Further investigations on this point should always embrace a special inquiry as to whether the drug has been vomited, which sometimes happens.

In ninety observations, omitting some cases where the preparation was faulty or was vomited, four cases occurred where the sweating was insignificant. In three of these habituation had taken place; the fourth was a case of Bright's disease, where the effect was very slight. In one case only the sweat was completely wanting. This was a case of acute rheumatism, in which the natural sweating of the disease had been very profuse, and, we may suppose, the glandular apparatus of the skin exhausted.

The sweat, which is always acid at the beginning, becomes neutral, or even clearly alkaline, before the end of the process. In six analyses, the proportion of urea contained in the sweat was from 2.50 grammes to 2.90 grammes per litre, the normal proportion being only .48 of a gramme per litre, or an excess of from .67 of a gramme to 1.13 grammes for the whole amount eliminated during the perspiration. The chlorides were also in excess, while only traces of carbonates and phosphates were found.

Feeble patients are sometimes debilitated by the excessive sweating, although no really unfavorable results were observed. No sweating was produced by jaborandi in the dog or guinea-pig, which normally do not sweat, except that the sebaceous glands around the anus of the first-mentioned animal took on an increased activity. On two horses in bad condition no effect was observed.

The salivation begins before the sweating, in from two to thirty-five minutes, usually thirteen, attains the maximum in about forty, and usually ends before the perspiration. During the salivation the mouth is warm, and the submaxillary glands are a little tense. The quantity of saliva may vary from one hundred to eleven hundred cubic centimetres, and seems to be usually in direct proportion to the quantity of sweat, although exceptions are numerous. It contains an abundance of the usual salts and of pytaline, as well as a small excess above the normal of urea.

M. Robin notes, as the usual sequence of the action of jaborandi, a

temporary dryness of the mouth. In some rare instances, the swelling of the salivary glands is excessive and painful, lasting from a few hours to two days and a half. The precise nature and cause of this occurrence do not seem to be as yet well determined. M. Robin speaks of a congestion and engorgement (with secretion) of the glands occurring at the same time as being a probable condition.

Certain effects have been noticed on the part of the eye and its appendages. The tears usually flow freely, even on to the cheeks. The pupil often contracts when the sweat becomes general, and remains contracted for some time. This action, however, is often wanting. Disturbed vision may depend simply on the increased lachrymation. In one case, however, there was almost complete abolition of vision for an hour and a half, and in another diminution, with *muscæ volitantes* like snow-flakes. These were not referrible to tears.

MM. Hardy and Ball¹ state that the urea of the urine is generally decreased during the action of *jaborandi*, although they found only small quantities of it in the sweat and saliva. They give, however, 1.14 grammes of urea as the average found in the sweat. M. Rabuteau objects to these experiments that the subjects were not placed on a uniform diet, and also that they had taken coffee, which in itself diminishes the urea of the urine. M. Rabuteau does not believe in an action of *jaborandi* on the excretion of urea. He thinks, besides, that it paralyzes the smooth muscular fibres, and acts in an opposite direction to *ergot*.

M. Gubler finds that *jaborandi* may be made to act as a diuretic by being given in small and repeated doses.

M. Cornil derived much advantage from it in a cold in the head, with abundant mucous secretion.

M. Fereol² has experimented twenty-eight times on eight patients. He has always used a cold infusion, and smaller doses (thirty grains) than are usually given. Great salivation was produced in all cases. The sweating was less constant and less energetic; none in one case, slight in another, moderate in three patients, and really profuse only in four. One man took it fifteen times in about six weeks. The urinary analyses were hardly numerous or careful enough to give much important information on the action of the drug upon the solid constituents of the urine. Its therapeutic action does not appear to have been so decided; one case experienced some relief of chronic rheumatic (or syphilitic) pains. In a case of acute rheumatism the pains diminished after the sudation and salivation, but an epigastric oppression and pain, pointing to an aggravation of pericarditis, caused a suspension of the treatment.

¹ Journal de Thérapeutique, No. 23, 1874.

² Journal de Thérapeutique, January 25, 1875, page 45.

Other cases apparently experienced little or no benefit.

M. Carville¹ endeavored to ascertain the mode of action of jaborandi by experiment upon the submaxillary gland. Canulæ were placed in the ducts of the gland, the animal having been curarized, the upper cervical ganglion of the sympathetic removed, and the pneumogastric cut, as well as the lingual nerve above the point where it sends filaments to the submaxillary gland. A galvanization of the cut nerve produced an active secretion from the gland, showing that it was in good order. An injection of two grains of jaborandi at once caused a flow of limpid saliva. A subcutaneous injection of sulphate of atropine being then made, the salivary secretion was immediately checked.

As a previous somewhat similar experiment, in which the lingual alone was cut, showed that the drug had no special influence on the lingual nerve, so the present one excluded the sympathetic, and only two alternatives remain to explain its action, namely: first, its effect on the glandular tissue; second, an effect on the termination of the nerves. [The action of the atropine speaks strongly in favor of the latter. — REP.]

A parcel of jaborandi recently imported from Brazil to England renders it probable that the drug is derived, either as asserted by the French authors, from the *Pilocarpus pinnatus*,² or a nearly allied species. It possessed the properties of the true jaborandi in a high degree. The chemistry of this drug is not fully worked out, but it appears probable that its active principle is not wholly extracted, and consequently the drug not fully utilized, by the ordinary method of infusion.³

THE PROTOPLASMIC THEORY OF LIFE.⁴

THE author of this work, although lately President of the Microscopical Society of Liverpool, and evidently an ardent worker in histology, modestly disclaims originality as to fact or theory, and states as his object, "to place before men of general scientific culture the idea that every action properly called vital, throughout the vegetable and animal kingdoms, results solely from the changes occurring in a structureless, semi-fluid, nitrogenous matter now called protoplasm."

Of this doctrine the author regards Fletcher as the prophet and Beale the expounder; while credit for aiding the exposition is given to Schleiden and Schwann, to Mohl and Naegeli, to Haeckel and Huxley, in varying degree, and, upon the whole, with impartiality.

¹ *Journal de Thérapeutique*, January 25, 1875.

² *Boston Medical and Surgical Journal*, September 24, 1874: Report on Therapeutics.

³ *Pharmaceutical Journal*, January 16, 1875, page 569.

⁴ *The Protoplasmic Theory of Life*. By JOHN DRYSDALE, M. D., Edin., F. R. M. S. London: Baillière, Tindall, and Cox. 1874. 12mo. Pages 288.

Naturally the matter of nomenclature receives attention. It appears, although not so categorically stated by the author, that during the past forty years the term *cell* has had the following meanings :—

1. A sack of protoplasm.
2. A sack of protoplasm containing a smaller sack, the *nucleus*.
3. The above containing a still smaller sack, the *nucleolus*.
4. The above containing a yet smaller particle, the *nucleolus*.
5. A sack, the protoplasmic contents of which have been replaced by fat or starch or salts or pigment granules.
6. A sack which has lost its contents and has been compressed into a *scale*.
7. A mass of protoplasm having a nucleus, but no envelope.
8. A mass of protoplasm with *neither envelope nor nucleus, nor trace of organization of any kind*.

Finally, in strict language, a *hollow sack* would be a cell, and one is almost surprised that some unprofessional and hard-headed critic has not called attention to this heterogeneous nomenclature, and caricatured the basis of our present doctrines of life and organization as a gigantic cell, substituting the sibilant for the initial letter.

In view of the above-mentioned discrepancies, it may be noted that Küss prefers the term *globule*; but its brevity as well as priority will probably cause cell to be retained. At present, as is well stated by Cleland, "the protoplasmic element has assumed an enormous importance, casting the nucleus into the shade; while the reign of the cell-walls has come to an end altogether."

With regard to the nucleus and nucleolus, the author, in a foot-note (page 58), thinks it has been shown that in *Paramœcium* the former is the *ovary* and the latter the *testis*; so that among even these low infusoria, a true sexual reproduction may alternate with fission.

The word protoplasm seems to have been first employed in 1844 by Hugo von Mohl, to designate the active contents of vegetable cells. But its distinctively vital characteristics were, according to our author, plainly set forth by Fletcher in 1835. "The property of vitality is restricted solely to a universally diffused, pulpy, structureless matter, similar to that of the ganglionic nerves and to the gray matter of the cerebro-spinal nervous system;" and he denies "any direct participation in irritability or vitality to those peculiar aggregations of matter which go to form respectively the cellular, dermoid, mucous, serous, vascular, fibrous, osseous, cartilaginous, or muscular tissues," "and also to the white matter of the nerves."

These quotations are given because to most of us Fletcher's Elements of Physiology is probably as unknown as it was to Beale before the year 1869. Should the views of the latter prove correct, not the least interesting feature of their history will be their almost exact prefiguration by Fletcher.

Beale, in 1860, proposed to call protoplasm *bioplasm*, or germinal or living matter; to designate all cell-walls and fibres as formed material, no longer endowed with vitality. Our author thus states Beale's limitation of the terms: "The living matter of Beale corresponds to the following histological elements of other authors: the viscid nitrogenous substance, within the primordial utricle, called by Von Mohl protoplasm; the primordial utricle itself, in

Naegeli's sense of that term, namely, the layer of protoplasm next the cell-wall; the transparent semi-fluid matter occupying the spaces and intervals between the threads and walls of those spaces formed by the so-called vacuolation of the protoplasmic masses; the greater part of the sarcode of the monera, rhizopoda, and other low organisms; the white blood-corpuscles, pus-corpuscles, and other naked wandering masses of living matter; the so-called nucleus of the secreting cells, and of the tissues of the higher animals, and many plant-cells; the nuclei of the gray matter of the brain, spinal marrow, and ganglions, and the nuclei of nerve fibres."

"And the name cannot be given to any substance displaying rigidity in any degree, from the softest gelatinous membrane up to the hardest teeth-enamel; nor to anything exhibiting a trace of structure to the finest microscope; nor to any liquid; nor to any substance capable of true solution."

With a qualification respecting the muscular tissue (to be referred to presently) we have no objection to urge against the above definition of true protoplasm.

To a great extent the volume is to be regarded as a critical exposition of Beale's doctrines. Our author's admiration for that most able, enthusiastic, and industrious histologist does not wholly blind him to his weak points, as may be seen by the remarks upon pages 52, 78, 126, 127, 167, and 200. But nothing less than a very strong prepossession could cause him to follow Beale in his views as to the structure and properties of muscular fibre. He adopts Beale's opinion that only protoplasm is stained by carmine, and quotes (page 132) his assertion that muscular tissue presents no indication of protoplasmic contents, and that it is not tinged by carmine. But after vainly, as it seems to us, endeavoring to explain Beale's "electro-motor" theory of contraction, he admits (page 171) that "the common theory has at first sight nearly everything in its favor, for *all protoplasm is contractile and gathers itself into a ball under stimuli*" (the italics are ours); "the muscular fibre also contains what to the microscope appears to be protoplasm, and is said even to take the carmine (see page 132)."¹ Certainly, if there is any tissue in which we should look for a living matter, whose most conclusive sign of life is contractile movement, it is the muscular tissue.

Respecting the mode of termination of nerve-fibres upon muscle, Beale differs from many other histologists in holding that "in no case are there nerve ends, but always plexuses or net-works, which are never in structural continuity with the contractile tissue of the muscle." This question has now a new interest from the fact that (as stated in the JOURNAL of March 4th, page 263) Gerlach has found gold to affect the nerve and the muscle alike; and that he quotes, with approval, Kleinenberg's brilliant generalization that "muscles are the contractile terminal expansions of nerves."

The latter part of the book under consideration is occupied with a somewhat dreary and unprofitable discussion as to the nature of life, involving metaphysical and theological questions which need not be here presented. Were this part omitted, and were the rest rearranged to some extent, so as to be fuller in some places and clearer and more concise in others, and if, finally,

¹ The page referred to is the very page on which is quoted Beale's opinion to the contrary.

a few typical figures were introduced, we think the author's object, as already quoted, would be fairly attained. The work is chiefly valuable as a fair historical sketch of the steps and phases of the theories respecting the "physical basis of life," since the cell has been discovered, and since the relative importance of its different elements has been under discussion. B. G. W.

PURDON ON CUTANEOUS MEDICINE.¹

THE author's prefatory remarks may fairly enough be taken as descriptive of the character of this book. "The various chapters composing this little work," he says, "were given chiefly as lectures in the summer at the Belfast General Hospital, or appeared as essays and papers in the *Medical Journal*. Whether wisely or not, I have collected all into one volume, adding such extracts from well-known authors as will, I hope, prove interesting and valuable additions to the matter treated of."

He has in this way brought together much material that is not to be found in any other book on skin diseases, but with it a good deal of mere theorizing and unsatisfactory observation. It is arranged, moreover, with little system, and can scarcely be said to have been digested at all. Dr. Purdon, who was one of the editors of the late *Journal of Cutaneous Medicine*, seems to have been an extensive reader of his exchanges and other medical journals, and to have made a note of nearly everything they contained relating to dermatology. We find, accordingly, that the opinions of all sorts of writers are quoted in connection with every disease the book treats of, and that they have often more to say upon the subjects than the author himself; indeed, some chapters are almost wholly made up of the opinions of others. That on seborrhœa, for instance, is almost literally taken from the pages of the *JOURNAL* — the translation of Kohn's article upon this disease. The author in many instances, moreover, has not even consulted the original works, but has been content with the statements of others concerning them. Thus, a portion of his chapter on lupus consists of the views of Volkmann, but instead of stating directly what this important "clinical lecture" expresses, he gives an abstract of a review of it from *Lo Sperimentale*. So, too, in connection with prurigo, he attempts to give the results of Dr. Derby's investigations, but really quotes in part the opinions expressed in this journal by the writer of the review of Dr. Derby's paper.

The book would more properly have been called a collection of the views of some of the modern writers on skin diseases, or an abstract of late advances in dermatology. But even in the latter sense it must be considered incomplete, for many of the latest and most valuable observations are not to be found in its pages.

On the other hand, the book does contain much that is interesting and that

¹ *A Treatise on Cutaneous Medicine and Diseases of the Skin*. By H. S. PURDON, M. D., Physician to the Hospital for Skin Diseases, Belfast, etc. London: Baillière, Tindall, and Cox. 1875. 12mo. Pages 272.

may not easily be found elsewhere, and although it cannot be regarded as a complete manual of skin diseases for the use of either student or practitioner, or as a commendable system of lecture-instruction, it will be in some respects a valuable addition to the physician's library.

Not a few errors of the proof-reader are noticeable throughout the work.

J. C. W.

DUTCHER ON TUBERCULOSIS.

THIS book¹ contains apparently the talk of an old gentleman (we beg the professor's pardon if he is not old), not only on tuberculosis, but almost everything else, a very liberal admixture of sentiment, poetry, and religion being thrown in. We can conceive that it would be a pleasure to spend an evening with Professor Dutcher, and hear his impressions on various topics relating nearly or remotely to medicine, but his friends made a mistake in letting him publish a book. It could only be criticised by re-writing it. It adds nothing to our knowledge, unless we accept the assertion that "the infiltrated variety" . . . "can be easily demonstrated by the microscope to be tubercular," and are willing to believe that the author is not mistaken when he says, "When any one will show me a caseous mass taken from the lungs of an individual who during life has manifested marked symptoms of phthisis, that does not contain tubercle-cells, then I will embrace the theory of the inflammatory origin of pulmonary tuberculosis." By the way, we would remark in this connection that the professor's illustration of "a section of lung magnified two hundred and fifty diameters, showing the pulmonary air-vessels filled with tubercular corpuscles," looks very much as if it was not one of his own, but had been copied from Hughes Bennett.

THE TREATMENT OF PLEURISY.²

DR. CORSON, when on service at the New York Dispensary, from 1854 to 1859, treated over five hundred cases of pleurisy. He believes that the absorption of pleuritic effusion was best promoted by the internal use of the iodide of potassium, and the application of one of the following "paints."

The milder croton-oil paint, for children, females, or sensitive males, is made thus:—

Olei crotonis tiglij	3j.
Etheris sulphurici fortioris	3ij.
Tincturæ iodini	3v. M.

¹ *Pulmonary Tuberculosis: its Pathology, Nature, Symptoms, Diagnosis, Prognosis, Causes, Hygiene, and Medical Treatment.* By ADDISON P. DUTCHER, M. D., late Professor of the Principles and Practice of Medicine in the Cleveland Charity Hospital Medical College, Ohio. Philadelphia: J. B. Lippincott & Co. 1875.

² *On the Treatment of Pleurisy; with an Appendix of Cases, showing the Value of Combinations of Croton Oil, Ether, and Iodine, as Counter-Irritants in Other Diseases.* By JOHN W. CORSON, M. D. New York: Wm. Wood & Co. 1874. Pages 31.

To be applied, two or three coats at a time, with a camel's-hair brush, over a small surface once a week.

The stronger croton-oil paint is composed as follows:—

Olei crotonis tiglli	3 ij.
Etheris sulphurici fortioris	3 iv.
Tincturæ iodinii	3 ij.
Potassii iodidi	3 j.
Iodinii	gr. x. M.

Considering the statement with which the essay begins, that "careful statistics from great charities have helped to fix the real value of many remedies," one is surprised not only at the entire lack of them, but also especially at the observations in the appendix, of which the following is a fair sample: "Chronic diarrhœa is known to be occasionally very persistent, especially if it is complicated with *tenderness of the abdomen*. Two lady patients were slowly recovering from protracted typhoid attacks, with teasing discharges from the bowels for weeks. Local paintings, steadily maintained over the tender spots, with *gentle opiates, bismuth, pepsin*, and *delicate astringents and tonics*, and a *milk diet*, were at last rewarded with gratifying restoration to health"! (The italics are ours.) And these cases are recorded as illustrations of the action of the croton-oil paint. *Mirabile dictu!*

RINGER'S THERAPEUTICS.¹

In the preface to this the fourth edition of his work, the author states that he has kept to the original plan of the work, which was to make it as practical a handbook as possible. Besides endeavoring to incorporate the important discoveries and new information which have been made known since the publication of the previous edition, he has added chapters on phosphorus, croton-chloral, and hamamelis. In turning to these chapters we find that the article on phosphorus describes the symptoms and effects of both the acute and the chronic forms of poisoning by this agent. He quotes Wegner's views regarding the necrosis of the jaw to which workmen exposed to the fumes of phosphorus are liable. Wegner believes that the necrosis results from the direct action of the phosphorus on denuded bone, and that it will not set in unless, from wounds or from carious teeth, some of the soft tissues are destroyed, thus enabling the phosphorus to reach the exposed bone. As a therapeutic agent attention is especially directed to the alleged utility of phosphorus in neuralgia.

Regarding croton-chloral, Dr. Ringer states that he has employed it largely and very successfully in facial and occipital neuralgias. Concerning the dose conflicting statements have been made. He has usually given five grains every two or three hours, and sometimes hourly.

The author has found hamamelis to arrest hæmaturia in four cases which had resisted many other remedies. He has also known it to be singularly suc-

¹ *A Handbook of Therapeutics*. By SIDNEY RINGER, M. D., Professor of Therapeutics in University College, Physician to University College Hospital. Fourth Edition. New York: Wm. Wood & Co. 1875. Pages 632.

cessful and prompt in arresting the bleeding from piles, even when excessive and amounting to half a pint a day, repeated almost daily for months and years. In piles it should be employed either as a lotion or as an injection, as well as taken by the mouth.

Dr. Ringer is an enthusiastic believer in the efficacy of drugs, and writes with much confidence concerning the therapeutic value of many of them. For instance, in writing of the sulphides he states that they appear often to arrest suppuration, and in threatening inflammation avert the formation of pus. Their influence is still more conspicuous after the formation of pus; for they then hasten maturation, and diminish and circumscribe the inflammation.

Under "Dietary for Invalids" several pages of formulæ are given for the preparation of food for the sick. Copious indices of medicines, and of the diseases in which they are useful, add much to the value of the work.

The book is written in a way which cannot fail to please the reader. We wish we could feel that experience justified one in having that confidence which Dr. Ringer evidently possesses in the efficacy of medicines, in nearly every case, to accomplish the desired results.

REPORT OF THE WORCESTER LUNATIC HOSPITAL FOR 1874.

THIS report, like those of all State hospitals, being addressed to the legislature, deals mostly with matters of administration, details of improvements, and prospective wants. The medical profession as a rule finds in such documents only incidental instruction in that which concerns insanity simply as a disease. We may glean something from the usual table of causes in this report, particularly as a column is appended of the number "predisposed" to insanity as distinct from the directly "hereditary" cases. Wherein this predisposition consists is not explained, but no doubt it would be found due to hereditary conditions short of or differing from actual insanity, such as intemperance or other nervous diseases in the direct line of ascent, or in collateral branches.

Of four hundred cases the cause was unascertained in one hundred and thirty. Of the remaining two hundred and seventy there was predisposition in one hundred and sixty-two, or just three fifths. This includes thirty-eight directly hereditary, and is about the usual proportion. The causes were in fifty-three cases moral rather than physical. That is, in one fifth of these cases the disease, insanity, seems to have originated in influences which affect the mind primarily, such as domestic trouble (fourteen), fright (one), grief (five), disappointment (one), pecuniary trouble (ten), religious excitement (nineteen). Females were almost exclusively affected by domestic trouble, males only by pecuniary trouble, both alike by religious excitement.

Of the four fifths affected by physical causes, *i. e.*, of two hundred and seventeen cases, thirty-seven were attributed to intemperance. Of these, seventeen were predisposed, whether to intemperance or to insanity the report does not state. The fact is significant in any light, either as showing the hereditary

nature of habitual intemperance, or the frequency of intemperance as a symptom of inherited insanity.

Without going further into detail it can but be remarked that if four fifths of the cases of insanity are due to physical causes, the responsibility for the prevention of mental disease rests with the general profession quite as much as with specialists and hospital superintendents. The latter are often charged with neglect in this direction, but it would seem that mental hygiene does not differ so much from physical hygiene after all. Let the body prove sound for two or three generations, and sanity of mind will follow as a matter of course. Insanity is in fact a physical disease, *i. e.*, a disease of the brain in all cases. The latest definition is that of J. Batty Tuke, Morrisonian Lecturer at Edinburgh.¹ He says, "Insanity consists in morbid conditions of the brain, the results of defective formation or altered nutrition of its substance, induced by local or general morbid processes, and characterized especially by non-development, obliteration, impairment, or perversion of one or more of its psychical functions." This, of course, includes the transient insanities which we call delirium, coma, and convulsions.

The causes of insanity in its more chronic forms are those which in persons not predisposed might give rise to physical rather than mental disease. The predisposition is due to similar causes acting through two or more generations, and affecting the cerebral organization especially. Individuals with a predisposition are liable to become insane on slight physical provocation, just as some patients are prone to delirium from slight causes. The so-called moral causes act on this unstable condition of the nerve-cells in a similar manner — excitement, loss of sleep, impaired nutrition, exhaustion, and consequent loss or irregularity of function.

The report states that one wing of the new hospital will be completed next fall.

T. W. F.

SANITARY MATTERS IN SAN FRANCISCO.¹

In this report are carefully collected many interesting facts, vitiated somewhat, as is commonly the case in our cities, by imperfect registration. The death-rate of the city for the seven years past was a trifle less than 21 to each 1000 inhabitants, while that of Boston for eight years ending in 1872 was 23.5. This difference is hardly as great as would be expected when we consider that San Francisco as a city is hardly a generation old, that the extremes in temperature from June to December were respectively 85° and 30° above zero, Fahrenheit, and that during the hottest night the mercury stood at 66° at ten o'clock. The tables show at a glance the important points, which are rendered more striking by comparison with other cities. It is a satisfaction to see a table of deaths (of those under seventeen years of age at least) by wards, indicating the operation of local causes of disease; and, from long

¹ Edinburgh Medical Journal, November, 1874.

² Report of the Health Officer of the City and County of San Francisco, for the Fiscal Year ending June 30, 1874.

habit, one almost expects the explanation given of the great mortality in Wards VII. and X. in bad sewerage and defective drainage. To one who has ever passed through and seen the filth and crowding of Ward IV., it is not surprising to read that the mortality among the Chinese is more than fifty per cent. greater than among the rest of the population, although they have so few children. As in many other parts of California, the mortality from consumption is large (about one seventh of the total), that in Boston for the past year having been a little more than one sixth. In San Francisco two thirds of such deaths were of persons born out of the United States. To explain the low death-rate from cholera infantum (one fifth as great as in Boston) one can think of no conditions except those of climate which are not more or less common to all cities. There were three hundred and eighty-seven deaths during the year from scarlet fever, in an estimated population of two hundred thousand; the suicides numbered three to each ten thousand inhabitants, while in England, under the present system of non-restraint, the ratio was only two thirds greater among the insane alone.

ORTHOPÆDIA.¹

THIS somewhat novel title is given to a book which treats not only of those diseases which usually come under the care of the orthopedic surgeon, but also quite a variety of others; in fact, every possible kind of deformity which is capable of relief by mechanical treatment, from in-growing toe-nail to procidentia uteri. We find also a long chapter on electricity as a therapeutic agent, and one on tonics and their effect upon the system. The book is liberally illustrated by wood-cuts, some of which portray contrivances of a novel character, while many are fashioned after old, familiar models.

The author is physician and surgeon in charge of the Hospital of the New York Society for the Relief of the Ruptured and Crippled, and has evidently had a large experience in the treatment of the diseases described in his book. A considerable amount of mechanical ingenuity is shown, and also discretion in regard to the relative value of the mechanical and operative treatment of deformities.

The writer seems to us to have attempted to cover too wide a field, and thereby to have done injustice to the separate departments of his work. In some of these we find little that can be considered an addition to our knowledge of the subject, while some are largely made up of quotations from various well-known writers. This latter is, we think, a growing fault with American authors, and shows a disposition to evade the more tedious part of book-writing by transplanting *en bloc* into the text extensive quotations from the writings of other men.

There is much need of a manual of orthopedic surgery suited to the wants of the general practitioner, and one which at the same time would be valuable

¹ *Orthopædia*; or, *A Practical Treatise on the Aberrations of the Human Form*. By JAMES KNIGHT, M. D. New York: G. P. Putnam's Sons. 1874.

to the specialist. To meet these indications in a book of this size it would be necessary to omit many subjects which are more fully and satisfactorily treated in other works, and to add extensively to others which belong properly in a treatise of this kind.

We have, however, found a number of useful hints which we do not remember to have seen given elsewhere.

THE SEWERAGE COMMISSION.

UNDER date of December 17, 1874, the Board of Health of Boston sent its fourth remonstrance to the City Council against the existing defects in the sewerage of the city. This communication, to which we have already referred at length, was presented to the last Board of Aldermen at one of its closing meetings (December 28, 1874), and was referred at once, without discussion, to the committee on sewers.

In his inaugural address to the new council, the mayor indorsed the action of the Board of Health, and at length (February 23, 1875) Alderman Power, as a representative of the committee on sewers, submitted an order, by which the mayor was authorized to appoint a commission, consisting of three civil engineers of experience, to examine and report as to the present sewerage of the city; the discharge of sewage into Charles River, Stony Brook, South Bay, and Dorchester Bay; the necessity of any high-water basin, on the site of the present full basin, for flushing purposes; the expediency of relieving the sewers at the South End by pumping; and finally to submit a plan for the outlets and main line of sewers for the future wants of the city. Realizing the possible economical advantage of combining in one scheme a new system of sewerage and the much-needed park, the order further authorized the commission to report whether it was expedient, in connection with the proposed works, to provide for any water basins or marginal drive-ways as ornamental and sanitary features of the city.

The order, as offered by Alderman Power, was unanimously passed. At a subsequent meeting (March 1) the order was so modified, on motion of Alderman Stebbins, as to allow the mayor, if he chose, to appoint some competent person skilled in the subject of sanitary science, in place of one of the civil engineers. The order, as modified, further instructed the commission to report an approximate estimate of the expense of any plan or plans for an improved sewerage which the commission should decide to recommend. A week later (March 8) Alderman Power endeavored to have the modification of the order, as adopted at the last meeting, so rescinded as not to allow the mayor to appoint, if he chose, a physician on the commission, since, as Alderman Power said, all physicians who knew anything about sanitary matters believed in the great advantage to be derived from a park, and as he did not believe in it he did not want to have the subject of a park mixed up with the sewerage question. The attempt, however, to re-modify the order failed (only three aldermen favoring the proposed change), and accordingly the mayor at once appointed as

the commission two gentlemen whose previous works are alone a sufficient guarantee of their fitness for the position, and Dr. C. F. Folsom, who has recently been chosen to fill the place, as Secretary of the State Board of Health, left vacant by the death of Dr. George Derby.

The first and most important step has therefore at length been taken towards securing a proper system of sewerage, and the Board of Health are to be congratulated that their oft-repeated request has been at last granted, and that the warnings which they gave have been heeded.

ON THE TREATMENT OF THE DIARRHŒA OF TYPHOID FEVER.

A PAPER on this subject is published by George Johnson, M. D., F. R. S., in the *Practitioner* for January, 1875. Diarrhœa being one of the most frequent symptoms of the disease, as well as one of the most troublesome, its treatment forms a very important part of the management of typhoid fever. For a number of years the practice of attempts to arrest the frequent discharges by repeated doses of opiates and astringents was adopted, but in many cases the diarrhœa continued, and meanwhile the intestines were distended with gas, and the abdomen became tumid and tympanitic. Then the patients were tortured by the application of turpentine stupes to remove the tympanites.

Of late Dr. Johnson has changed his practice, having gradually arrived at the conclusion that in the treatment of typhoid fever careful nursing and feeding are of primary importance, while, as a rule, no medicines of any kind are required, and when not required they are often worse than useless. As a rule, the fever patient at King's College Hospital has the "yellow mixture," which is simply colored water, and except an occasional dose of chloral to procure sleep, and a tonic during convalescence, Dr. Johnson gives no active medicines of any kind. He feeds his patients mainly with milk, with the addition of beef-tea and two raw eggs in the twenty-four hours, and he gives wine or brandy, *pro re natâ*. For a time he adopted the method which has been strongly recommended, of giving repeated doses of diluted mineral acids, but he abandoned the practice, becoming convinced that the acids irritated the ulcerated mucous membrane, caused pain and griping, and often increased the diarrhœa.

Dr. Johnson thinks that the diarrhœa of a typhoid patient is often increased by his inability to digest the beef-tea and eggs which are sometimes too abundantly given. When we have reason to suspect that such is the case, it is well to keep the patient for a few days entirely upon milk, which contains all the elements required for the nutrition of the tissues in a form most easy of digestion.

With such a treatment as has here been recommended, Dr. Johnson is in every way satisfied. During the past year he had under his care in the hospital twenty-nine cases of fever; fifteen typhoid, and fourteen typhus. Some of the cases were severe, but all were discharged well. To only one of these patients was opium given, and that was for the relief of an irritable condition of the bowels which remained after a severe attack of typhoid.

COMPLETE OUTWARD DISLOCATION OF THE ELBOW
WITHOUT FRACTURE.

A CASE of this very rare accident has recently fallen to the care of Dr. Hatry, of Lyons, who makes it the text of a paper on the subject, which is published in *Le Lyon Médical*. Dr. Hatry states that complete dislocations of the elbow outward are very rare. Excepting two cases published by Nélaton and Dr. Dénucé, those described in various surgical works are not accurately nor minutely reported. They seem for the most part to answer to backward and outward dislocations of the fore-arm, because usually the sigmoid cavity of the ulna still embraces, to some extent, the condyle of the humerus. Having met at the military hospital of Lyons with a complete outward dislocation of the elbow without fracture, and while proposing to himself to make a general study of lateral dislocations of the elbow, Dr. Hatry became aware of the existence of a very interesting monograph on this subject by Dr. Salleron, surgeon-in-chief of the military hospital at Lyons, which was published in 1855, and which he was surprised not to find mentioned in any of the contemporary works on surgery.

Dr. Hatry's case was that of an artillery-man of vigorous constitution, who was brought to the hospital March 2, 1874. But a short time before, the patient, while reaching for a harness to put on to a horse, fell with the entire weight of his body upon the pavement of the stable, and struck upon the palm of his right hand, the fore-arm being extended at the time. The patient presented himself supporting his right fore-arm with his left hand, which, when unsupported, was completely twisted from without inwards, and swung like a limb completely fractured. The posterior aspect of the forearm was external, and the anterior internal. Flexion and extension were completely abolished, and supination and pronation were only possible as passive movements. There was a considerable projection below the elbow upon the external face of the fore-arm, caused by the elevation of the muscular mass at that point by the upper extremities of the bones of the fore-arm, which had preserved their normal relations to each other. The transverse diameter of the elbow was greatly increased, measuring twenty centimetres, while that of the left elbow was thirteen centimetres. It was evident from the position of the olecranon that the right fore-arm was slightly elevated along the external border of the arm, and measurement showed a diminution of two centimetres in length when compared with the left upper arm. The tendon of the triceps projected, being tense and turned outwards; the tendon of the biceps was neither flexed nor contracted. By passing the fingers from without inwards one could with perfect ease feel under the skin the head of the radius, then the olecranon, the sigmoid cavity, and the coronoid process of the ulna; still further on the epicondyle, the trochlea, and the cavity for the olecranon, covered only by the skin, and finally, the epitrochlea, which was six centimetres distant from the olecranon. All the articular ligaments were torn, but the principal vessels were intact, and their normal pulsations could be felt throughout the limb. The nerves also appeared intact; there was not much pain, and the swelling was slight at first in spite of the severity of the accident, although later it was con-

siderable. The patient being seated, reduction was immediately attempted. Extension and counter-extension were made with the aid of assistants, the thorax and upper part of the humerus being fixed, and manipulations were made about the elbow of flexion combined with motions to press backwards and inwards the olecranon and the upper extremity of the fore-arm. Reduction was accomplished suddenly and promptly. The fore-arm was flexed and placed in a sling. Cold compresses were applied, and absolute repose was ordered.

Notwithstanding the severity of the lesion no marked inflammatory action supervened. On the 6th the swelling had become considerable, but there was no fever, and the tumefaction was evidently due to effusion of blood. No complications followed between the 6th and the 10th, and the swelling and ecchymosis diminished. Meanwhile slight passive motion of the elbow was made, which caused but little pain. The movements of flexion and extension were gradually increased, and frictions, massage, electricity, and the carrying of weights by the patient, were made use of. By the end of April the elbow had regained its normal movements, and the patient left the hospital May 2, 1874.

Dr. Hatry remarks that this case is interesting in many ways. As has been stated, complete outward dislocation of the elbow without fracture is a very rare lesion, only two well-authenticated cases having been known previous to the one here reported.

A remarkable symptom, and one not observed in the other cases, was the extreme mobility of the fore-arm, which swung about, and had to be supported like a fractured limb.

Notable, too, were the ease of reduction, the absence of inflammatory complications, and the rapidity of cure, in spite of the gravity of the accident.

Passive motion was employed very early, — about the fifth day after the accident, — with the most satisfactory results. From the observation of this and other cases, Dr. Hatry concludes that we ought never to hesitate to adopt a similar procedure, unless hindered by some such complication as inflammation or fracture.

MEDICAL NOTES.

— The regular meeting of the Suffolk District Medical Society will be held on Saturday evening next, at 7½ o'clock, in the lecture-room of the Boston Society of Natural History, corner of Berkeley and Boylston streets.

Second report of committee on rooms; election of delegates to the American Medical Association. The following papers and cases will be read: Dr. J. N. Borland, Fracture of the Sternum, with cases. Dr. H. I. Bowditch, Aneurism of the Aorta treated by Electrolysis. Dr. C. J. Blake, Curious Result following Cicatrix of the Membrana Tympani. Dr. J. R. Chadwick, Second Ovariectomy.

— Dr. T. O. Reynolds, of Kingston, N. H., reports to the *Clinic* the following account of a large number ofappings, with the quantity of fluid

removed, a physician being the subject. "Chancing to come into possession of a 'relic of antiquity' in the form of a physician's account-book, with count of an extensive medical and surgical practice extending over the middle and latter part of the last (eighteenth) century, I found on the fly-leaf a memorandum kept by the son, also a physician, of the 'tappings,' of his father, with the dates and quantities of fluid drawn off at each operation.

"It appears that the old gentleman, Dr. Benj. Rowe, of Kensington, N. H., who during his day enjoyed an enviable reputation as a surgeon, suffered in his last years from ascites. On the 28th of March, 1786, he was tapped for the first time, having twenty-four and one half pounds of water removed. From this date to March 16, 1790, he was subjected to the same operation sixty-seven times, and the total amount of serum removed was two thousand three hundred and sixty-eight and one-half pounds — nearly eight barrels — two hundred and thirty-six gallons. The quantity at each operation varied from twenty-two to forty-five pounds.

"A noticeable feature of the accounts contained in the book is the fees charged, *e. g.*, 'Attending Mrs. — in labor, and journey, 5s. 6d.' 'To setting arm, 4s.' 'To amputat. foot and journey, 6s.,' etc. A neighbor suggests that opium must have been cheap in those days."

— The disturbances which have occurred in the medical school of St. Petersburg, and particularly at the lectures of one of the faculty, M. Cyon, were not originated, it seems, by the students, but by certain members of the faculty who were supported by the press. The faculty has for several years been divided into two parties strongly opposed to one another; one of these factions favors reform, and the other is composed of conservatives. The minister of war has, curiously enough, come to the aid of the former, and has on the recommendation of M. Kozloff appointed seven new professors, of high scientific attainments, and among them M. Cyon. The object of these appointments was to introduce certain important reforms in the method of instruction, and particularly in the examinations. The conservative party appealed to the press opposed to the minister of war to influence the students against these reforms, and their repeated attacks on the projects published in the journals gave rise to the disturbances alluded to. The minister of war, accordingly, without calling the students to account for their conduct, dissolved the academical council, and has formed a new commission to take charge of the school. In the mean time the emperor appointed a commission of six of his ministers to reorganize the whole system of instruction in the higher schools, and it is very probable that these institutions will be deprived entirely of their independent organization. Other cities of Europe besides St. Petersburg and Paris have been the scene of disturbances of this character. Rome has not been free from them, and they have lately also occurred in Spain. The professor of physiology in the medical school of Barcelona having been hooted at and insulted by a large class at one of his lectures, drew a revolver and threatened to fire upon the students. A panic ensued, and the lecture-room was rapidly emptied. A strong force of police was required, however, to enable the pugnacious professor to beat a retreat from the building in safety.

SURGICAL OPERATIONS AT THE BOSTON CITY HOSPITAL.

[SERVICE OF DRS. CHEEVER, THORNDIKE, AND WADSWORTH.]

THE following operations were performed on Friday, March 12, 1875:—

1. Excision of the ankle-joint.
2. Tenotomy for talipes varus (double).
3. Cystic tumors of the scalp.
4. Plastic operation for ectropion.
5. Cancer of face.
6. Tattooing the cornea.

1. *Excision of Ankle-Joint.*—The patient is twenty years of age. Two months ago, when at sea, he fell from aloft upon the deck, and thence into the hold of the vessel, striking upon the chain-cable. The whole distance was between seventy and eighty feet. The patient states that both legs were broken just above the ankle; that splints made of orange boxes were applied and kept upon the right leg eight or nine days, but not as long upon the left. The former has united well, without deformity, and promises to be a useful limb.

The left tibia and fibula were broken one and a half inches from the lower ends. The union of the tibial fragments was very firm; that of the fibula not as strong. The lower fragments were extensively comminuted, and with the foot were carried backwards, forming an angle of forty-five degrees with the upper fragments. The malleoli preserved their relative positions to the astragalus, and there was fair motion in the ankle-joint. The foot could be flexed to a right angle with the leg and placed upon the ground, but no weight could be borne upon it. A sinus had formed over the outer malleolus, leading down to carious bone.

While otherwise healthy, this young man was prevented from earning his living by the deformity; and as there was a sinus leading into carious bone, his prospects of improvement were poor. Moreover, the union of the fragments was so firm, and the line of fracture so near the joint, that it would have been impossible to re-fracture the bones, and in that way correct the deformity. Taking into consideration these facts, and also the fact that the foot was entirely useless, and would probably remain so, Dr. Cheever decided, after a consultation, to perform excision of the tibio-tarsal articulation.

A vertical incision, four inches long, was made upon each malleolus, and the seat of the fracture carefully explored. A large piece of the lower fragment of the tibia was displaced backwards upon the tendo Achillis. Another part of this fragment was split off from the outside, and was attached to the lower fragment of the fibula, which was bent sharply backward at an obtuse angle with the shaft of the bone. All of these fragments were firmly glued together. With the knife and periosteum-scraper, the soft tissues were cleaned from the lower fragments, and the ligaments of the ankle-joint divided. The ends of the tibia and fibula, including the malleoli and articular surfaces, were then sawn off just below the line of fracture, and a thin slice removed from the articular surface of the astragalus. All of this being done through the original lateral incisions, none of the principal vessels were wounded. The bones were divided with a key-hole saw, copied from the plate of the saw used

by Mr. Adams, of London, in his subcutaneous division of the neck of the femur. Hæmorrhage was prevented by Esmarch's method; and when the tubing was removed excellent circulation was restored in the foot, both the anterior and the posterior tibial arteries pulsating well. No tendons or nerves were divided in the operation. No vessels required ligature. The wound was gently plugged with two compresses filled with minutely broken sponges, bandaged, and placed in a fracture-box.

2. *Tenotomy.* — A boy, ten months old, had the following deformities: The ring and little fingers of both hands were very small and rudimentary, the phalanges being shortened, the last one to a mere tubercle. The first and last toes of the left foot were entirely gone, and the others were small and webbed. The fourth and fifth toes of the right foot were very rudimentary, the last one being only a nodule. Talipes equino-varus existed in both feet, and was congenital. The right foot was not so deformed as to prevent its being drawn into the natural shape before the operation. But the left could not be so returned with any reasonable manipulations.

In the left foot Dr. Cheever divided the plantar fascia, the tendons of the tibialis anticus, posticus, and flexor longus digitorum, and the tendo Achillis. In the right foot the tendon of the tibialis posticus and the tendo Achillis were cut. After the operation both feet could be drawn into the normal position. The apparatus, which had been fitted to the feet before the operation, will be applied in three or four days.

3. *Sebaceous Cysts of Scalp.* — The patient was an old man, who had had these growths for thirty years. The principal tumor was three inches in diameter, and was situated just above and behind the right ear. It had lately become very painful. Dr. Thorndike removed it through an elliptical incision. The contents were the usual thick sebaceous substance. Two or three smaller ones were removed by splitting them open, and pulling out the sac with forceps. The patient refused to take ether.

4. *Plastic Operation for Ectropion.* — The left upper eyelid of a middle-aged man was everted and drawn upward by a cicatrix upon the forehead, the result of a severe injury to the head several months ago. Dr. Thorndike removed the cicatricial tissue, loosened up the lid, and slid down a long, curved flap with a wide base from the forehead. The result promises to be good, as all tension upon the lid was removed, and healthy skin was substituted for contractile, cicatricial tissue.

5. *Cancer of Face.* — An old man had an ulcerating epithelial cancer in the right parotid region, of eight months' duration. It was three inches in diameter, encroached upon the external auditory meatus, and involved nearly half of the lobe of the ear. The tumor was circumscribed, and somewhat movable. No glands were enlarged. As the pain was severe, the discharge offensive, and the growth apparently not very deep, Dr. Cheever advised its removal, and performed the operation. The tumor was entirely removed by a free dissection, without wounding any vessel of importance. Some of the larger branches of the facial nerve were exposed, but not divided. The parotid gland was healthy. The wound was large, and must necessarily heal in a great measure by granulation.

GEO. W. GAY, M. D.

LETTER FROM NEW YORK.

[FROM OUR OWN CORRESPONDENT.]

MESSRS. EDITORS,—For some time the homœopathic practitioners here have been trying to get control of one of the hospitals under the charge of the Commissioners of Charity and Correction. On the removal of the old board in December last, and the appointment of the new, the homœopaths again renewed their request, using all the personal and political influence they could bring to bear upon the commissioners, one of whom is a firm believer in homœopathic doctrines. By a resolution recently passed by the board the building now used for a small-pox hospital, having accommodation for about one hundred patients, has been given to them to be used as a general hospital, provided the Board of Health are willing to remove their patients to another locality. I have heard that, some years ago, Dr. A. Clark made them an offer to place one of the wards in Bellevue Hospital under their control; the offer was declined.

Last June the obstetrical wards in Bellevue Hospital were closed on account of the great mortality from puerperal disease; in May last there were twenty-eight deaths in fifty-three confinements, and the waiting women were transferred to Charity Hospital, and placed in pavilions.

These cases, although they came directly from the infected wards of Bellevue, did not develop puerperal disease. All the new patients were placed in wards on the top floor of the hospital. During the year 1874 there were four hundred and thirty-one women confined at Charity Hospital; of these, fourteen developed puerperal disease, and eleven died—a mortality of one in thirty-nine and two elevenths cases delivered.

Dr. C. S. Bull read quite an original paper before the Neurological Society at its last meeting, On the Connection between Certain Lesions of the Optic Nerve and some Affections of the Spinal Cord, with special reference to Pott's Disease. There is found when the cord is implicated above the eleventh dorsal vertebra, and occasionally below, in Pott's disease, certain abnormal conditions of the pupil and circulation in the optic disk, which have heretofore escaped the investigation of those interested in this class of disease; namely, a moderately dilated and sluggish pupil, and a passive hyperæmia of the optic disk; the small nutrient vessels are enlarged, and perhaps increased in number, giving to the disk a red appearance. There is with this an enlargement and sometimes a tortuous condition of the retinal veins. It is well known that in the majority of cases in Pott's disease when the cord is involved, it is at first simply pressed upon by the inflamed and thickened dura mater (pachymeningitis) in a mechanical manner; later it is the seat at the point of pressure of a chronic myelitis, which soon extends, according to the well-known law of Türck, downwards in the anterior, and upwards in the posterior columns of the cord. There are but three ways by which changes in the circulation of the optic disk in this disease can be brought about: first, by contiguity of tissues, the changes being propagated from the cord to the base of the brain; secondly, by changes in the cerebral circulation; and thirdly, by irritation of the vaso-motor nerves of the cord acting through the sympathetic on the vessels of the eye. In the vast

majority of cases, we never find any symptom of cerebral irritation or lesion, which would be the fact if either the first or the second hypothesis were true — and when we do have symptoms of brain-lesion, the ophthalmoscopic appearance would be that of a descending neuritis, or choked disk; whereas the changes in the calibre of the vessels, and the sluggish pupil, point to an irritation of the sympathetic, causing a paresis of the muscular coat of the arteries. These abnormal changes pass away as the limbs regain their power.

Quite an instructive and interesting discussion took place at the last meeting of the Academy of Medicine, on Pneumonia: its Prevailing Type, Etiology, and Treatment. Dr. Austin Flint, Sr., opened the discussion, and spoke of the differences that the disease presented in different times and places — that the disease is of much greater gravity South than North. In regard to bleeding, it had not in his experience ever arrested the disease. He was a strong advocate of the employment of opium, not only in this disease, but in *all* local inflammations; it placed the system in a better condition to tolerate the local affection. An important item in the history of pneumonia is the formation of heart-clots; measures, therefore, which have a tendency to prevent this accident are important. Ammonia has been used for this purpose. Dr. Flint said he had employed digitalis, on the idea that it increased the power of the heart's action, and thus diminished the liability to the accident. Another symptom to be treated is the condition of hyper-pyrexia. Quinine has been employed for this purpose, and is much used. Dr. Flint advocated the use of cold water in the form of douche, bath, or pack. Alcohol and alimentation hold important places among the means to be used.

Dr. W. H. Thomson discussed the use of cold to the chest, applied by means of a rubber ice-bag, kept on for from eight to ten hours, until the temperature was brought down to 100° Fahr., or even lower; the ice should be re-applied when the temperature rose. He regarded wetting the skin as a drawback, the object aimed at being simply the withdrawal of heat; the contact of water with the skin he considered to be a source of irritation, and of discomfort to the patient. He gave carbonate of ammonia in ten-grain doses every two hours, and quinine. He considered failure of the heart's action a cause of death in many cases. He gave the history of five cases treated on the above plan; one was fatal, due to œdema of the lungs. If there were much pain in the side early in the disease he would apply a few leeches.

Dr. A. L. Loomis considered that the majority of cases of pneumonia occurred in debilitated patients. He thought that idiopathic pneumonia was rare. When a man under the influence of alcohol, and in a condition of chronic alcoholism, is exposed to cold, and contracts a pneumonia, it is an alcoholic pneumonia that is developed. Again, when a man debilitated by malarial poison has pneumonia, it is a malarial pneumonia. The same may be said of other states of the system. Now all these conditions should enter largely into the question of treatment. He was not disposed to use cold to reduce the temperature, as it has a tendency to cause the pneumonia to spread, and it was only temporary in its action. He believed that quinine, given in full doses of not less than ten grains, possessed the power to lower the temperature, and that a temperature of 103° Fahr. might well be let alone.

Dr. Leaming considered that simple uncomplicated pneumonia was rare, while pleuro-pneumonia was common, and he thought this the important characteristic of the present epidemic. As to the treatment, if he saw the patient early in the disease, he would try the abortive plan by the application of heat or cold; meanwhile stimulating the skin and using heart-sedatives, etc. His own preference was, first, for the sedative action of calomel, and second, quinine. If he should not see the case early enough to attempt the abortive plan, he would deem the next best thing to be to watch the symptoms, and endeavor to carry the patient through. He advocated giving the chest rest by means of strapping with adhesive plaster; this measure relieves pain, restrains cough, prevents exposure to cold air, and allows the patient to change his position without much distress. The temperature may be kept down by quinine.

The training-school for nurses in connection with Bellevue Hospital is just about entering on its third year. It has proved a success far beyond the most sanguine anticipations of its friends, and bids fair to solve the question how we are to obtain thorough and intelligent nurses, not only for our hospitals, but in private families. They now have nine wards in Bellevue Hospital under their charge, namely, three female medical, three female surgical, and three male surgical. The improvement in the hospital since they have been in charge is apparent to any one visiting the institution, in the neat and orderly condition of the wards under their care, and the superior nursing the patients receive. The medical board is so well pleased with the new order of things that they wish the whole hospital might be made subject to it; this they are unable to do at present from want of nurses. Each of the wards mentioned is under the care of one nurse and two assistants. The expenses of the school for the past year were about \$15,000.

WEEKLY BULLETIN OF PREVALENT DISEASES.

THE following is a bulletin of the diseases prevalent in Massachusetts during the week ending March 20, 1875, compiled under the authority of the State Board of Health from the returns of physicians representing all sections of the State:—

Bronchitis, pneumonia, and rheumatism are reported as prevailing in all parts of the State. Influenza has subsided very considerably in all the sections.

Among the diseases prevailing locally the following are reported:—

In Berkshire, influenza still has a hold.

In the Connecticut Valley, diphtheria and tonsillitis are quite common. Small-pox has disappeared from Holyoke.

In Worcester County, influenza, measles, and scarlatina prevail.

In the Northeastern section, measles has become much more prevalent. In Acton and Lawrence scarlatina has a local prevalence, and in the former place it is of a severe type.

In the Metropolitan section, measles continues to prevail, but it is subsiding.

Scarlatina is also diminishing; whooping-cough is increasing, but is not yet very prevalent. Coincidentally with the epidemic of measles, many cases of rubella or "German measles" have been reported. A few cases of diphtheria in Cambridge and Arlington are reported.

In the Southeastern section, a very marked subsidence of measles, scarlatina, and whooping-cough is noted. In Fall River there have been twelve cases of small-pox since March 2; all the cases are of mild type and doing well. A case of cerebro-spinal meningitis in Plympton is reported.

Except rheumatism, all the reported diseases have declined in prevalence since last week.

Scarlatina is most prevalent in Worcester County; measles in the Metropolitan section; whooping-cough in the Southeastern counties.

F. W. DRAPER, M. D., Registrar.

COMPARATIVE MORTALITY-RATES FOR THE WEEK ENDING MARCH 13, 1875.

	Estimated Population.	Total Mortality for the Week.	Annual Death-rate per 1000 during Week.
New York	1,040,000	619	31
Philadelphia	775,000	366	24
Boston	350,000	162	24
Providence	100,000	42	22
Worcester	50,000	12	12
Lowell	50,000	16	17
Cambridge	44,000	29	34
Fall River	34,200	10	15
Lawrence	33,000	15	22
Springfield	33,000	9	14
Lynn	28,000	4	8
Salem	26,000	12	24

BOOKS AND PAMPHLETS RECEIVED.

Scleritis Syphilitica: Its Pathology, Course, and Treatment. By Fred. R. Sturgis, M. D. New York: G. P. Putnam's Sons. 1875.

Eighth Annual Report of the Board of Trustees and Officers of the Minnesota Hospital for the Insane, for the Year ending November, 1874. St. Paul. 1875.

Reports of the Trustees and Superintendent of the Butler Hospital for the Insane. Providence. 1875.

A Retrospect of the Struggles and Triumph of Ovariectomy in Philadelphia. The Annual Address before the Philadelphia County Medical Society. By Washington L. Atlee, M. D. 1875.

Syphilitic Lesions of the Osseous System in Infants and Young Children. By R. W. Taylor, M. D. New York: William Wood & Co. 1875.

Lectures on Diseases of the Respiratory Organs, Heart, and Kidneys. By Alfred L. Loomis, M. D. New York: William Wood & Co. 1875.

The Coming Medical Man. By D. B. St. John Roosa, M. D. New York: D. Appleton & Co. 1875.

First Annual Report of the City Physician of Knoxville, East Tennessee, for 1874.